Anthropology and impact evaluation: a critical commentary

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ANTHROPOLOGY AND IMPACT EVALUATION: A CRITICAL COMMENTARY

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Introduction

Assessing 'impact' is a high priority for mainstream international development. This is reflected in both a growing academic literature and in a proliferation of discussions, policies, meetings, and repositories of completed impact assessments and evaluations. And most of these are based on quantitative and experimental or quasi-experimental methods. Among the nearly 2500 impact evaluations on the 3ie database, for example, less than 5% have a primarily qualitative methodological approach (classified in this case as 'other'). For the World Bank, experimental and quantitative methods represent the 'Gold Standard' in the search for evidence-based policy. Thus, of the 170 World Bank's Development Impact Evaluation (DIME) -commissioned IEs, only 17% use 'non-experimental' methods. Quantitative methodologies such as randomized control trials dominate such agencies' attempt to answer the increasingly important question: 'did what we did have the desired outcome?[1]'. This is despite arguments which suggest that the ways in which 'success' and 'failure' in development are understood depend very much on the perspective from which they are assessed (Crewe and Harrison 1998, Mosse 2005).

The debate about the relative merits of qualitative and quantitative research in the social sciences has a long history which I will not go into here. Polly Hill's (1986) *Development Economics on Trial: An Anthropological Case for the Prosecution*, is a classic example of a critique of quantitative methods as used in development economics - and there are many others. Some have also emphasized that the quantitative/qualitative dichotomy is overdrawn (Collier et.al 2010, Stern 2012). But the new emphasis on results, and celebration of randomization and experimental methods in particular - what Barrett and Carter call 'methodological triumphalism' (2010: 516) - gives particular salience to the growing body of critics who ask about what is lost, question the politics and ethics of these evaluations, and make arguments for, at the very least, mixed methods approaches (for example EES 2007, Barrett and Carter 2010, Cornwall, 2014, Jones 2009, Jones et.al 2009, White 2011, Stern et.al 2012).

This paper aims to engage with this criticism in the context of a recent impact evaluation – of an irrigation development project in Malawi, published by the International Food Policy Research Institute (IFPRI) (Nkhata et.al 2014). My aim is to contribute to such debates by developing a detailed analysis of what may be 'missed', when an evaluation is viewed from an anthropological and locally-contextualized perspective. The evaluation with which I am engaging was predominantly quantitative and comes up with generally positive conclusions concerning the impact of the project and recommendations for further irrigation development. This is despite the fact that there is quite a well-developed literature for the specific site (and some qualitative evidence within the evaluation itself) which points to rather different conclusions. I am therefore also interested in a wider question; that of how particular methods and perspectives can take centre-stage, even in the face of strong evidence which points in an opposite direction. As I will discuss, this is a matter of the politics of knowledge production and of how particular disciplinary perspectives may come to dominate.

A note on my own positionality is relevant here. First, like the other anthropologists contributing to this series of papers, my professional background primarily enables me to comment on what is missed; it is less useful for saying anything about the technical merits of the analysis itself. This is relevant to broader considerations of mutual understanding (or lack of it) between different disciplines, particularly between anthropology and economics (see for example Bardhan and Ray 2009), as I will discuss later. Second, my choice of evaluation is determined by my own interests and knowledge; arguably it needed to be in order to make the arguments that I will develop below. In particular, I have recently been involved in research

which examines the politics and institutions of irrigation development and includes an ethnographic case study in Malawi[2]. Our project involved a year of fieldwork in Nsanje District in the South of the country. This is not quite the same area as covered by the IFPRI study which focuses on the Bwanje Valley Irrigation Project in the Central Region. However, the scheme that we examined had many parallels with Bwanje Valley in terms of history and political context, and I will draw on some of these parallels in what follows.

Before getting into the detail of the evaluation itself, a brief account of the wider context from within which it arises is necessary.

Agricultural growth and irrigation in Africa: 'privileged solutions'?

Policy priorities in international development come in and out of fashion. From the 1940s through to the 1960s, there was a strong emphasis on supporting livelihoods and food security through 'improved' farming practices and increased agricultural productivity. Technical expertise in the form of agronomists, vets and irrigation specialists focused on bringing 'traditional' farmers into the 20th Century. Now, in the early 21st Century, agricultural growth and improved productivity are again prominent as policy priorities, now characterized as 'pro-poor agricultural growth' (Djurfeldt 2012). The current DFID-ESRC Growth Research Programme (DEGRP) is predicated on the view that economic growth and modernization are key priorities (Wiggins 2013). In this, 'Africa', and particularly sub-Saharan Africa (SSA) is of central importance. Following from its 2007 World Development Report on 'Agriculture for Development', the World Bank has developed a strong narrative that SSA is a 'sleeping giant' to be woken by investment and commercialization, including within agriculture (2009). The content evolves of course, but there are remarkable similarities between the mid-20th Century and contemporary discourses: the need to develop infrastructure, to teach farmers better practices, to rationalize and codify access to land and resources (Peters 2013). Along the way, all sorts of lessons have apparently been learned; the importance of 'local' participation and existing knowledge, the complexity of gender relations, the frustrating weakness of local institutions. However, the basic paradigm remains the same: growth through modernization.

Among the central elements of this, irrigation has had an important place. As Moris (1997) argues, irrigation has been treated as a 'privileged solution' to Africa's food security problems; a solution that can (self-evidently) be achieved by particular material and organizational technologies. In the context of changing climate and increased need to manage limited water resources, irrigation is becoming increasingly important. However, African irrigation is generally seen as both full of potential and as failing to live up to that potential. A contrast is frequently made between the extent of irrigation in Asia and its correspondingly limited development in Africa. For example, Sakagi and Koga (2011) note that, as of 2008, only 6% of the potential land in SSA was irrigated, as opposed to 47% in Asia. You et.al (2011) point to the continent's largely untapped groundwater resource, and the fact that the majority of Africa's irrigation is concentrated in only five countries: Egypt, Madagascar, Morocco, South Africa and Sudan. They argue that there is considerable potential for expansion in the remainder of the continent, but particularly in sub-Saharan Africa. For some, the irrigation potential represents an important investment opportunity, though others characterize the acquisitions of land that this involves as 'land grabs' (Bues and Theesfeld 2012, Mehta et.al 2012, Mehta et.al 2013, Smaller and Mann 2009).

The history of support to irrigation has followed dominant development paradigms. First, especially since the 1950s and 1960s, it has involved highly engineered 'schemes', characterized by Veldwisch et al (2009) as 'irrigation factories' on account of their external and imposed origins. Many of these had problems with productivity and poor maintenance and were subsequently abandoned. Then, in line with ideas of participation, privatization, and 'farmer first', this was partially replaced by an emphasis on support both to farmer managed practices, and to 'handing over' schemes to locally-formed Water User's Associations. One manifestation of this, Irrigation Management Transfer (IMT), seeks mechanisms for transferring the management of irrigation systems from government and donors to 'communities', based on the combined

ideas of participation, local control and a reduction of the role of the state. IMT was particularly favoured from the 1990s onwards and is still a central tenet of much donor-support, alongside the rehabilitation of earlier schemes. The World Bank doubled its lending for irrigation between the periods 2000-2005 and 2006-2010 (You et.al 2011) and both the FAO and USAID state that support to irrigation in Africa is a policy priority. The current emphasis on smallholder livelihoods has also meant that, though support to irrigation is usually via 'schemes', some of which may cover thousands of hectares, they are nevertheless intended to improve the livelihoods of small-scale farmers and their families. Funds have gone towards both physical infrastructure and the attempted clarification of user rights to both land and water.

This context is important for understanding the broader policy debates from within which the impact evaluation arises and to which it is intended to contribute. It is to this that I turn now.

Irrigation in Malawi: the context for evaluating impact

The study assesses the impact of an irrigation scheme in Malawi: the Bwanje Valley Irrigation Scheme (BVIS) in Dedza District in the Central Region. The scheme was initially constructed in the late 1990s at a cost of around $15 million and then rehabilitated with further Japanese funding in 2005. It covers 800 hectares and is said to benefit around 2000 farmers in 14 surrounding villages. It was built with the objective of improving income and household food security through the irrigated production of rice and certain other crops (maize, soybean and cowpeas).

In Malawi as a whole, irrigation has tended to follow the pattern described above for the rest of SSA: the development of foreign-funded irrigation schemes during the 1960 and 1970s, their subsequent falling into disrepair, and a recent move towards technical rehabilitation and farmer control. Irrigation is currently an important policy priority under the Malawi Growth and Development Strategy (GoM 2011), and has received substantial support from donors. For example, the World Bank and African Development Bank are supporting plans to develop and improve irrigation in around a million hectares of land as part of the Green Belt Initiative – a scheme that aims to address Malawi's chronic food security problems. An important dimension of these problems has been recurrent droughts and floods and it is anticipated that improved irrigation will go some way towards achieving resilience in the face of such environmental challenges. There is a strong narrative that Malawi has great -and underexploited - potential for irrigation; the FAO has estimated that only 2.3% of the cultivated land area is irrigated (Veldwisch 2009).

Responsibility for irrigation formally rests with the Department of Irrigation in the Ministry of Water Development. However, there is a complex politics behind this as the separate Ministry of Agriculture has responsibility for agricultural extension and the relationship between extension and support for irrigation and agriculture in general is somewhat contested. As I will discuss below, the policy context for irrigation development is also strongly influenced by debates concerning access to and control over both land and water in which arguments about the relative merits of 'state', 'customary' and 'private' land take centre stage.

The impact evaluation described

The evaluation that I am commenting on here aims to measure the impact of the BVIS on household food security and poverty. It was published by the International Food Policy Research Institute (IFPRI) as an output from its Malawi Strategy Support Programme. The evaluation draws on the MSc thesis of the principal author, Nkhata, completed at the Lilongwe University of Agriculture and Natural Resources (LUANAR).

The authors note that while numerous studies have already demonstrated the positive impact of irrigation on household food security and poverty, these have tended to fail to control for sample selection bias. In

other words, they have focused on participants, rather than non-participants and thus failed to account for factors such as farmer motivation and pre-existing wealth. In addition, the study aims to go beyond previous ones by systematically examining the impact of irrigation on 'marginalised households', which are defined as those that are headed by women and youth; and low-income households.

The evaluation thus addresses three principal questions:

- *Does growing crops under irrigation improve the food security status of participant households? Moreover, for those households that use irrigation, does growing two crops under irrigation versus growing only one crop improve household food security status?*
- *Does growing crops under irrigation reduce poverty of participant households? For those households that use irrigation, does growing two crops under irrigation versus growing only one reduce poverty?*
- *Do marginalized households benefit from using irrigation? For those groups of marginal households using irrigation, who benefits more or less among the groups? (Nkhata et.al 2014: 1)*

In order to answer these questions, the study conducted a sample survey of 412 households, of which 169 were scheme participants and 243 were non-participants. Of the 412 households, roughly equal numbers are classified as 'youth' and 'adult'-headed (204 versus 208[3]), and a large majority (299/412) were female headed. 262 of the sample are classified as 'low income' as compared to 150 'high income'[4]. The questionnaire covered a range of aspects of household livelihoods including demographic characteristics, income, assets and livestock ownership, costs and benefits of the BVIS, and food security status. It uses a technique called propensity score matching (PSM) after correcting for sample selection bias. To determine whether 'marginalized households' benefited more, endogenous switching regression was used. Lastly, qualitative key informant interviews were carried out alongside the survey in order 'to gain insights and lessons that could be used to improve the operations of the BVIS and to design better interventions' (Nkhata et.al 2014: 11) although the details of what these comprised are not provided.

The principal outcome variables that are the focus of the evaluation are household income and food security. The proxies used to measure these are 'annual agricultural income', being 'the sum of both income from irrigation and from rain fed agriculture' (Nkhata et.al 2014: 3), and 'per capita caloric intake' from the two main staples of cereals and rice. In addition, the evaluation modeled the 'participation decision of a household in BVIS' (Nkhata et.al 2014: 3) according to a random utility framework.

The **findings** of the evaluation strongly support the positions both that irrigation reduces poverty and that it improves food security. In summary, participants in the scheme earned on average 65% more than they would have had they not participated in the scheme. They also increased their daily caloric intake by 10% than if they had not participated in the scheme. With regard to 'marginalized households', only benefits in terms of household agricultural income were considered. The study found that youth-headed households earned around 81% more than if they had not participated in the scheme and female-headed households earned 86% more. It is suggested that the fact that the scheme constructed 13 boreholes in the 14 villages would also 'have reduced the time that women spend to fetch water, enticing greater participation from female headed households in agricultural activities within BVIS' (Nkhata et.al 2014: 11). Low-income households were also found to have benefited from the scheme in terms of increased income, though not as much as youth and women-headed households, who seemed to have benefited most.

In the penultimate section, and drawing on informal and key informant interviews, the study mentions some further 'insights for improving BVIS operations' (p.11). Here, problems in overall availability of adequate water and conflict over access to water are noted. In particular, it is found that scheme participants with higher income are favoured in water-allocation and there is alleged bribery of the scheme

management sub-committee. There are also apparently significant problems with both marketing and the provision of credit for scheme participants.

The study concludes with a series of recommendations, the first of which is that irrigation interventions should be extended to other areas of Malawi. Other recommendations focus primarily on the observations drawn from the qualitative work: that marketing and credit needs to be improved and that there is a need to address the problem of water abstraction from upstream schemes. In addition, it is noted that future studies might focus on indirect impacts of irrigation and on understanding the sources of income disparity between low and high-income households.

Commentary: what was found and what might have been missed

These concluding observations are intriguing and something of a conundrum. In the last page or so of the evaluation, the focus turns away from its central aim – the quantitative assessment of impact at the individual and household level – to observations that arise from qualitative data collection and reflect difficult problems of politics, power and resource access and control. Does this undermine or compromise the otherwise positive story that is being told? Is it possible to reconcile the two competing sets of findings? In what follows, I will first provide a critical commentary on the results of the quantitative data collection itself before turning to consider the important issues of methodology and knowledge-creation to which these questions give rise.

The evaluation provides a strong justification for support to more irrigation schemes of the kind provided by the BVIS. However, from an ethnographic perspective there are alternative interpretations of the evidence and assumptions that arguably undermine the case made. I divide my analysis of this into three main areas: concerns associated with the data collection itself; questions about the impacts which are identified and the assumptions on which they are based; and lastly, those concerns that arise from what is missing – the impacts that are not considered and do not enter the frame of assessment. One of the strongest critiques of purely quantitative impact evaluations is that they tend to define the possible impacts of interest at the beginning so that there is no room to explore or uncover the unexpected. Did income increase? Did agricultural productivity increase? Did farmers change which crop they grew? This leaves no room for consideration of less easily measured, indirect and often unexpected impacts. Were local politics influenced? Did the gender division of labour change? Did some people lose out? What else happened? Although the OECD (2002: 1) definition of 'impact' in development explicitly includes '*positive and negative, primary and secondary long-term effects produced by a development intervention, directly or indirectly, intended or unintended*', much of this is obscured through the need to define parameters for measurement in advance. In the case of the BVIS, this is particularly pertinent, as what is excluded might fundamentally undermine the positive impacts that are identified.

Data collection and analysis

From an anthropological perspective, the way in which data is collected is important. Ethnographic fieldwork entails not only immersion in the research context but also a degree of transparency about how the data collection took place, any problems that might influence its reliability, and the role of the researcher themselves[5]. The BVIS impact evaluation provides no information on these things, which nonetheless might be important in shaping the nature of the information gained. For example, who actually collected the data and is there any possibility that it might have been distorted by their own understandings? This is not to say that the data was biased or wrong, simply that there is nothing on which to judge whether this is the case.

In addition, the data collection and subsequent analysis relies on some quite 'heroic' assumptions concerning farmers' knowledge of their own productivity, and willingness to report truthfully on this. As

Polly Hill put it in relation to large sample surveys: '*… this field material (I would not call it data) is not a pure kind of substance with an inherent validity, which drops readily into the hands of those who are well organized, but rather matter that has commonly been extracted from unwilling informants by resorting to many convolutions, blandishments and deceits, including sheer guesswork which is not necessarily particularly inspired*' (Hill 1986:33). In the case of the BVIS, the information gathered is, on the one hand, about sensitive subjects which people may have good reason to misreport; information about income is notoriously unreliable. And, on the other hand, about matters on which it is unlikely that respondents will be able to give accurate data; weekly quantities of maize and rice consumed by a household. An argument might be made that among people for whom access to food is chronically insecure, knowledge of what happens to every last grain of rice or maize is important. This may be true, but this does not mean that those who are asked in a questionnaire are either necessarily the ones with this knowledge or able to calculate weekly consumption for the whole household. This problem is part of a broader one concerning assumptions about the nature and meaning of households, to which I turn next.

Impacts that <u>were</u> sought out: problematic assumptions

Irrigated and non-irrigated farming

The focus of the evaluation is on the effects of the irrigation scheme and, as a result, it looks at 'household agricultural income', interpreted as what farmers gain from their irrigated production of rice and maize. But livelihood strategies in rural Malawi are much more complex than this and, importantly, involve the complex interplay of farming both *inside* and *outside* of irrigation schemes with farmers having access to both sorts of land (Ferguson and Mulwafu 2007). It is unlikely ever to be the case that farmers are full time irrigators. In general, they will have a range of other livelihood sources, ranging from keeping livestock and fishing to trading, or working as *ganyu* labourers on others' farms. These income sources vary according to season, and are determined by factors such as labour availability and access to cash to buy inputs. The focus on solely rice and maize and on the irrigated areas excludes what may be important sources of livelihood for individuals and households. Importantly too, it does not account for that which is not sold; the distinction between 'cash and 'subsistence' crops obscures the ways in which some crops may be both or either, depending on circumstances. For example, in the irrigated scheme in Muona which we examined we found that people often traded their rice crops in order to buy beans or maize for household consumption.

'Households as units' and female-household headship as a proxy for gender analysis

The evaluation relies on some very strong and problematic assumptions concerning households - assumptions which have been belied by decades of research globally, yet continue to have widespread persistence. Over the last forty years an extensive literature[6] has demonstrated that in any context, but particularly in sub-Saharan Africa, households are not simple units of consumption, production, reproduction and decision-making: they are sites of power, containing both cooperation and conflict, pooling and separation; their boundaries may be flexible and fluctuate. For the study, the default position is that the 'household head' is a man. This is understandable and reflects a common prevailing narrative. As Kathewera-Banda et.al (2012) note, in Malawi, not only are men assumed to be the head of household, but as part of this, they also dominate decision making and control over income. However, acceptance of this assumption in this case is associated with the further one that the male household head is a 'benevolent dictator' (c.f. Becker 1981) who will always act in the interests of all of his family members. As has been well-established, this may or may not be the case and certainly cannot be taken for granted.

In Malawi, a strongly patriarchal 'culture', with widespread acceptance of male household decision making and control, is mediated by factors such as access to and control over land. Matriliny, for example, has been thought to influence women's bargaining power within the household (Kathewera-Banda et.al 2011, Peters 2010). Dedza district, in which BVIS is located, is predominantly matrilineal. However, how this

influences household relations in relation to the scheme, in which land allocation by the cooperative, is not at all clear. What is evident is that household decision making and access to and control over resources, cannot neatly be 'read' from questions about household income and wellbeing. It is highly likely that the exercise of power in relation to this may be invisible and involve negotiation and compromise that are arguably best understood through immersed observation.

In the study, the gender of the farmer is absent, apart from when it comes to household headship, but the focus on women-headed households cannot be a proxy for understanding the impact of gender relations within the household[7]. Two obvious examples of where this might be highly significant in understanding the impact of the intervention concern food security and income. As I have noted, data on 'household' caloric consumption are likely to be quite unreliable. Equally importantly though, to extrapolate from household level data to that of individuals by dividing by numbers in the household takes no account of how food is shared, nor of the ages of household members. Importantly too, it does not account for seasonality of food consumption, nor of the social values that are connected to food and food consumption cultures. Similarly, income from rice and maize sales gives a very partial picture of household economics and certainly tells us nothing about how such income is controlled or by whom.

'Marginalised households'

The evaluation also considers the impact of the scheme on 'marginalized households': youth and female headed, and those which have a low income. There are several issues on which to comment with this. First, in general, 'marginality' is taken for granted, rather than explained. Though it is the case that female and youth headed households might well be 'marginal' in the sense that they might have problems in, for example, access to labour and land, this cannot be assumed to be the case by definition. Indeed, defining youth as 'under 35' is at the very least questionable, and there is certainly nothing to support the assumption that they will be marginal. Furthermore, the extent to which these categories overlap with 'low-income' is also not clear; nor are the dynamics that contribute to their marginality.

Impacts that were not sought out

Labour and land

In the discussion above, I have suggested that the rather narrow focus on income and food security from rice and maize obscures the ways in which other impacts might in fact exist. In particular, the effects of the scheme on access to and control over resources, especially land and labour, remain unexamined. This is an important omission. The 'official' account of land allocation within the scheme is that initially land was allocated by the chiefs to those who had helped with construction. After the rehabilitation in 2006, powers of land allocation were transferred to its managing co-operative under an agreement with JICA and the irrigation department. Each member of the co-operative was then allocated 0.4 hectares of land.

However, evidence from elsewhere in the country gives cause to cast doubt on this official account. At Muona scheme, an almost identical process of land reallocation has taken place, but there is considerable contestation over 'rights' to land that have been established at different times and via different processes. Claims of 'ownership' as a result of historical precedent and 'traditional allocation' come up against current practices of allocation via the scheme committee, with resultant conflicts. Although there is not meant to be a market in land, in reality, people sell and rent their plots according to both their ability to command labour and to influence those in positions of power. In this process, despite nominally equal plot sizes, there in fact develops considerable variation in land-holding and it is certainly the case that differentiation is increased through the presence of the scheme. Such differentiation is part and parcel of rural life, but its dynamics need to be understood if those who are already 'marginal' are not to become more so.

Politics, institutions and sustainability

The above points suggest the significance of politics and institutions in shaping the impact of the scheme. The mechanisms for scheme management are outlined in the evaluation, but only in terms of formal structures; the management committee and its various sub-committees. What is not mentioned is the significance of the history of these formal institutions and how they have interacted with others over the years. In the case of BVIS, there is existing research, cited in the evaluation, which explores this history (Chidanti-Malunga 2009, Veldwisch et al 2009). The study by Veldwisch et.al in particular is highly critical. It provides a detailed account of how the scheme was conceived and implemented as a case of 'informed amnesia…outside interveners designed a system and parachuted into Bwanje Valley as a black-boxed technology' (2009: 197). In this study, the authors argue the Japanese agency, JICA, played a dominant role and that in general the people living in the area were excluded from planning and decision making. The only exception to this was that the Traditional Authority was asked, on a single occasion, to sign a paper consenting to the project (Veldwisch et.al 2009: 2011-2012). The article is robust in its criticism; rather than the success that is claimed, they suggest that there are serious problems, both in terms of technical functioning (siltation, collapsing dykes, fields not leveled properly) and also in terms of how formal institutions function. In particular, it is suggested that the management committee represent a local elite in collusion with government officials and Japanese experts. The article by Chidanti-Malunga (2009) also notes that there is a great deal of conflict between the farmers and the scheme committee, particularly over allocation of water, and that farmers frequently take matters into their own hands by 'illegally' diverting water.

The evaluation does in fact note that there are serious problems of water supply, both within the scheme, and to the scheme as a whole. Staff blamed the construction of other irrigation schemes upstream which were not adhering to nationally agreed abstraction rights. This is also confirmed by Veldwisch et.al, Chidanti-Malunga , and Johnstone (2011). This last study is an MSc dissertation which presents cases that include the diversion of the entire supply of the scheme to a local politician. It also stresses the significance of unreliable supplies to the scheme as a result of upstream usage and questions the long-term sustainability of the scheme.

These issues are clearly important. The scheme does not exist in isolation from a broader political context, nor is its internal functioning devoid of the complex interplay of formal and informal institutions, both inside and outside of the scheme. Within the evaluation, assumptions are made concerning how farmers make decisions, as if these were independent from such politics, whereas they are of course strongly shaped by them. What is important for policy making is then to understand how these processes take place.

Conclusions: the politics of knowledge creation in impact evaluation

As noted, research which stresses the politics of access to and control over resources are referenced in the impact evaluation. In addition, the qualitative aspect of the evaluation reveals similar problems; for example, it notes that farmers report the need to pay bribes to members of the water management sub-committee in order to secure access to water. What is of interest here is why a set of issues that is clearly important and central to the success or failure of the scheme, are not also central to the picture presented. The quantitative analysis supports a narrative of support to more irrigation schemes like BVIS, on the basis of the improved income and food security in which it results. I have noted the problems with this analysis, in terms of its assumptions about the nature of farming livelihoods and the way that households operate. Yet perhaps more important for a commentary on impact evaluation in general, and the potential or otherwise of 'mixed methods', is the fact that such insights are not seen to undermine the overall conclusion.

So how are we to interpret this apparent paradox? I would suggest that a part of the answer lies in how particular forms of knowledge and understanding are valued and validated. The majority of the IFPRI paper

relies on sophisticated quantitative analysis, which takes pride of place above the less positive, and much less easy to interpret, complexities of intra-household dynamics, history and politics. It is as if only what can be counted counts. This element of the evaluation speaks to a world view which is simpler than ethnography suggests and in which predictability and measurability are assumed. It also reflects a particular training and skill set which relies on these assumptions. The critical points noted above are hardly new or unknown. It is entirely possible, indeed likely, that the authors of the paper are fully aware of the complexity of rural social life. They also may well understand that household relationships are not always about caring, sharing and mutuality. But these considerations are not part of what they are professionally responsible for reporting on. Ironically therefore, they do not enter the main narrative. There may be a nod to qualitative research, but it is incidental to the central analysis.

The marginalization of the qualitative analysis in the study arguably undermines any suggestion that the simple addition of qualitative perspectives will fill in the gaps produced by more quantitative methods. This means that 'mixing methods' alone may not be sufficient as a solution to the problems of quantification. Much recent discussion of evaluation stresses the value of mixed methods; combining qualitative and quantitative methods to provide a holistic picture (Cornwall 2014, White 2011). For example, in her account of the evaluation of a nutrition intervention Cornwall (2014) discusses participatory process evaluation as an alternative alongside quantitative methods. This involves an appreciation of the importance of process, and of unexpected outcomes. It is taken as given that success and failure will mean different things to different people and 'stories of change' are valuable in understanding these different perspectives – from 'community' members through to local officials and project implementers. However, unlike ethnographic approaches that may take considerable time, participatory process evaluation may be done quite quickly. In the case of Cornwall's evaluation this was only ten days. The focus is on a series of participatory exercises (diagrams, sorting, ranking, mapping), generally carried out in a public way, which ideally enables a degree of deliberation and transparency which is generally lacking in survey methodologies.

These approaches apparently provide an effective means of revealing the less obvious and involving diverse stakeholders. They are thus a counterbalance to the problems of quantification. However, my observations concerning the BVIS IE point to the need for caution. On the one hand it is arguably the case that participatory mixed methods tend to identify consensus and agreement, rather than analyse how such things might be the product of unequal power relations. This is more likely with shorter periods of research, though this might be mitigated by embedding participatory methods in extensive background contextual research. Perhaps more important though is the issue of the identity of the researchers, noted above. Cornwall acknowledges the significance of the possible effects of the investigators on the research process; in her case there was a degree of suspicion of the two white researchers who only visited for a short time. In the example of the BVIS IE, the issue of identity of the investigator is somewhat different; here, though methods were mixed, the researchers were not. Professional training – and possibly therefore what was seen as important – point away from the political and the contested.

As White (2014: 13) has argued, mixed methods need to be much more than 'adding' a qualitative component, without integrating it in any meaningful way. I would suggest that this is a matter of, not just of what is added, but how – and by whom. As I noted, as an ethnographer, I am not very well positioned to comment on the intricacies of the quantitative analysis in the IE; indeed much of it is a language that, not only do I not understand, but of which I have been 'trained' to be suspicious. For anthropologists, unpacking contestation and power is central to the research approach; counting what cannot easily be counted is not. Why do we expect the situation to be different for a quantitative scientist, for whom the language of power, politics and contestation may be alien – at least in a professional context[8]? This is no more where professional reward and vindication lie than would be the case if I started working with complex econometric equations.

The implication of this is that, not only is ethnography important, but that it needs to be undertaken by those for whom it is a primary epistemological perspective, not a secondary add on. In addition there needs to be space for serious - and respectful - dialogue between these perspectives. One promising example is a recent study by Ananthpur et. al (2014) which combined Randomised Control Trials (RCTs) with a four year long ethnography in an evaluation of a citizenship training programme in India. The ethnography is built into the evaluation design, and is carried out by ethnographers; it is not just an additional 'qualitative' element that is added to the dominant quantitative research design. It is used to explain the apparent lack of impact of the programme that is revealed by the RCT and makes a strong argument for the kind of 'thick description' that ethnographic research produces.

Importantly, therefore, mixing methods also needs to be about mixing researchers from different disciplines and being as transparent as possible about how bias, professional remits and individual worldviews enter the picture. This is important because impact evaluations are so often not *just* about assessing what works and what doesn't, but may also fulfill a function in providing justifications for or against particular courses of action. This does not mean that they are necessarily a legitimating device (Jones et.al 2009), but it is certainly the case that they may be. In the context of a renewed push for donor support to irrigation schemes in sub-Saharan Africa, the political function of such evaluations is likely to be especially significant and dialogue between diverse disciplines critically important.

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Endnotes

[1] As opposed to the slightly different question: 'was what was planned done?' Much development evaluation in the past has focused on this, rather than impacts, understood in terms of overarching goals rather than achievement of planned outcomes.

[2] 'Innovations to Promote Growth Among Small Scale Irrigators' DFID/ESRC Growth Research Programme ES/J009415/1.

[3]For the purposes of the study, youth are regarded as 'those beneficiaries less than 35 years of age' (Nkhata et.al 2014: 2).

[4]Low income households are defined as those earning less than US$1.25 per day.

[5]This is in an ideal world of course. There are plenty of examples of ethnographic fieldwork that is also lacking in transparency or contains biases that are under-acknowledged or even considered.

[6] There is no space to go into this here. Influential works include Agarwal 1997, Harris 1981, Whitehead 1981.

[7] Again, the literature is extensive. See Chant (2007)

[8]And for whom the separation of the professional and the personal is arguably both legitimate and necessary.